

polymer material comprising the polymer particle is not determinate of the polymer particle's size. Thus the prior art cited does not render the presently claimed invention obvious. The Examiner suggested that cancellation of Claims 61-75 which limit the weight ratio of the particles, would help bring the application into condition for allowance. Claims 61-75 are canceled herein. Additional arguments in support of the patentability of Claims 44-60 are presented below.

Claims 44-47, 50, 54-57, 61, 62, 65 and 69-72 were rejected under 35 U.S.C. §103(a) as unpatentable over Ronay (U.S. Patent No. 5,876,490). Applicants submit that it would not have been obvious for one of ordinary skill in the art working from the disclosure of the Ronay patent to prepare the aqueous dispersions of the present invention for the following two reasons; (1) one of ordinary skill in the art would not associate a polymer's molecular weight with the size of a particle derived therefrom, and (2) the contradictory teachings of the prior art applied (namely Ronay describes polymers adsorbed onto an inorganic particle whereas the present application describes inorganic particles adsorbed onto a polymer particle).

On page 3 of the Office Action it is stated that the Ronay patent teaches the use of abrasive particles and polymer particles at size ratios that fall within the range claimed in the present application. Applicants wish to note that Ronay does not disclose the size of the polymer particle. In column 6, lines 28-31 and column 7, lines 18-23, Ronay describes the molecular weight of the polyelectrolyte additive (polymer particle) as a function of the number of repeating monomer units but does not disclose the size of the particle. *Applicants note that there is no predictable relationship between the molecular weight of a substance and the size of a particle comprising that substance.* Independent Claims 44 and 58 both

contain a limitation to the ratio of the mean particle size of the polymer particle and inorganic particle.

Ronay discloses an abrasive composition wherein a polyelectrolyte material (polymer) adsorbs onto an abrasive particle (see for example column 3, lines 38-39; column 3, lines 45-46; column 3, lines 50-51; column 3, line 53 and column 5, lines 10-11). The present invention requires that a plurality of inorganic particles be attached to the surface of a polymer particle (see the present claims). The Ronay patent teaches away from the present invention by stating that the polymer material adsorbs onto the inorganic particles, the reverse of the present case. The Office acknowledges this difference between the presently claimed invention and the prior art on page 2, paragraph 3 of the Office Action where it is stated that Ronay claims a plurality of inorganic particles are attached to a surface of polymer particles.

The prior art applied does not disclose or recognize a critical element of the present invention, namely the particle size ratio of the polymer particle and the inorganic particle. The prior art therefore does not contain an element of the presently claimed invention and cannot render the presently claimed invention obvious. Additionally the prior art directs those of ordinary skill in the art to select particles that allow a plurality of polymer particles to adsorb onto an inorganic particle whereas the present invention teaches the adsorption of a plurality of inorganic particles onto a polymer particle. Applicants submit that the presently claimed invention is unobvious over the prior art cited and respectfully request the withdrawal of the rejection under 35 U.S.C. §103(a).

It is respectfully submitted that this amendment to the claims places all claims in condition for allowance. Applicants thus respectfully request the reconsideration and withdrawal of the outstanding rejections, and the passage of all now pending claims to Issue.

Respectfully submitted,

OBLON, SPIVAK, McCLELLAND,  
MAIER & NEUSTADT, P.C.



Norman F. Oblon  
Attorney of Record  
Registration No. 24,618

Stefan U. Koschmieder, Ph.D.  
Registration No. 50,238



**22850**

(703) 413-3000  
Fax #: (703) 413-2220  
NFO/SUK/js

I:\atty\SUKOS\2002\February\00397632-am.wpd

DOCKET NO.: 0039-7632-0X  
SERIAL NO.: 09/531,163

**MARKED-UP COPY**

**IN THE CLAIMS**

Claims 61-75 (Cancelled).